



7. Appendix E: Economic Development & Cost Data

Economic Development Assumptions

Estimates for Job Creation and Tax Revenue as a Result of the Plan are based on the following assumptions:

- Taxes are at standard Washington, D.C. rates
- 25% of residential proposed households would be new to the District.
- Average retail sales would be \$250/foot/year.
- Average residential rent is \$1,775 per month.
- Buyers/renters will spend 30% of their income on housing.
- Average income level is \$65K per household.
- 80% of household income is subject to taxes.
- Average monthly rent is \$170 for parking spaces.
- Cap rate is 9.5%.
- Annual full-time equivalent wages & benefits for a construction related job is \$54,000, and 50% of the TDC for all construction will go to salaries and wages.

Infrastructure Cost Estimates Southwest Waterfront Development Plan

| Transportation Related Work (15% Contingency) | | |
|---|--------------|--------------------|
| DESCRIPTION | COST | |
| Demolish Water Street | | \$846,981 |
| Demolish Surface Parking Lots | | \$2,311,889 |
| Improve Main Avenue as an Urban Boulevard | | \$1,900,260 |
| Maine Avenue Landscaping | | \$437,060 |
| New Traffic Signals | | \$350,000 |
| | TOTAL | \$5,846,189 |

| Public Open Space Related Work (15% Contingency) | | |
|---|--------------|--------------------|
| DESCRIPTION | COST | |
| Promenade | | |
| Park/Promenade Improvement (North Side) from 4th to 6th | | \$245,295 |
| Landscaping/Pedestrian Improvement (North Side) from 4th to 6th | | \$96,600 |
| Paving for Emergency Vehicles | | \$834,199 |
| | TOTAL | \$1,176,094 |

| | | |
|-------------------------|---|--------------------|
| Street-End Parks | | |
| | Park Surfacing/Landscaping | \$1,475,000 |
| | New Cul-De-Sac Access Roads Between 7th and 9th | \$1,635,944 |
| | TOTAL | \$3,110,944 |

| | | |
|---------------------------|--|--------------------|
| Market Square Park | | |
| | Park Surfacing/Landscaping | \$3,000,000 |
| | New Access Road and Plaza South of Fish Market | \$519,432 |
| | TOTAL | \$3,519,432 |

| | | |
|-------------------|---|--------------------|
| Civic Park | | |
| | Park Surfacing/Landscaping | \$5,500,000 |
| | Below-grade Parking (Residual Land Value) | \$2,160,000 |
| | Reconfigure Waterfront Access Roads South of M Street | \$1,406,450 |
| | TOTAL | \$9,066,450 |

| Utility Projects (25% Contingency) | | |
|---|--------------|--------------------|
| DESCRIPTION | COST | |
| Relocation of Water Lines on Maine Avenue | | \$805,500 |
| Relocation of Sewer Lines on Maine Avenue | | \$668,250 |
| Relocation of Natural Gas Lines on Maine Avenue | | \$222,150 |
| Relocation of Electrical Lines on Maine Avenue | | |
| | TOTAL | \$1,695,900 |

Summary of Costs for the Southwest Waterfront Development Plan



A N A C O S T I A W A T E R F R O N T I N I T I A T I V E

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Demolish Water Street

| | Unit | Estimate | Unit Price | Total |
|-------------------------|----------|----------|----------------|---------------|
| Connector Pavement | CYD | 6,259 | \$ 30.00 | \$ 187,770.00 |
| Curb and Gutter | LF | 7,082 | \$ 6.00 | \$ 42,492.00 |
| Sidewalk | SQYD | 7,871 | \$ 8.00 | \$ 62,968.00 |
| Tree and Stub | Each | 184 | \$ 500.00 | \$ 92,000.00 |
| Borrow Backfill | CYD | 8,329 | \$ 25.00 | \$ 208,225.00 |
| Seed and Sod | SQYD | 25,760 | \$ 5.00 | \$ 128,800.00 |
| Light Poles | Each | 13 | \$ 250.00 | \$ 3,250.00 |
| Parking Meters | Lump Sum | 1 | \$ 3,000.00 | \$ 3,000.00 |
| Basin and Connect Pipes | Each | 16 | \$ 500.00 | \$ 8,000.00 |
| | | | | \$ 736,505.00 |
| | | | 15 Contingency | \$ 110,475.75 |
| | | | Total | \$ 846,980.75 |

Demolish Parking Structures

Parking Lot Opposite Phillips is 2 Levels

| | Unit | Estimate | Unit Price | Total |
|----------------------------|----------|----------|----------------|---------------|
| Handrail | LF | 878 | \$ 5.00 | \$ 4,390.00 |
| Retaining Wall and Columns | | | | \$ - |
| Stem | SF | 13609 | \$ 8.00 | \$ 108,872.00 |
| Footing | SF | 3951 | \$ 8.00 | \$ 31,608.00 |
| Top Slab | SF | 23374 | \$ 6.00 | \$ 140,244.00 |
| Columns | Each | 19 | \$ 1,000.00 | \$ 19,000.00 |
| 1st Level Asphalt | CYD | 1299 | \$ 30.00 | \$ 38,970.00 |
| Borrow Backfill | CYD | 8657 | \$ 25.00 | \$ 216,425.00 |
| Sod and Seed | SYD | 2681 | \$ 10.00 | \$ 26,810.00 |
| Light Poles | Lump Sum | 1 | \$ 5,000.00 | \$ 5,000.00 |
| | | | | \$ 591,319.00 |
| | | | 15 Contingency | \$ 88,697.85 |
| | | | Total | \$ 680,016.85 |

Parking Lot Opposite Zanzibar and Hogates

| | Unit | Estimate | Unit Price | Total |
|----------------------------|----------|----------|----------------|---------------|
| Handrail | LF | 790 | \$ 5.00 | \$ 3,950.00 |
| Retaining Wall and Columns | | | | \$ - |
| Stem | SF | 22152 | \$ 8.00 | \$ 177,216.00 |
| Footing | SF | 5112 | \$ 8.00 | \$ 40,896.00 |
| Asphalt | SF | 2721 | \$ 30.00 | \$ 81,630.00 |
| Borrow Backfill | CYD | 13108 | \$ 25.00 | \$ 327,700.00 |
| Sod and Seed | SYD | 5618 | \$ 10.00 | \$ 56,180.00 |
| Light Poles | Lump Sum | 1 | \$ 7,000.00 | \$ 7,000.00 |
| | | | | \$ 694,572.00 |
| | | | 15 Contingency | \$ 104,185.80 |
| | | | Total | \$ 798,757.80 |

Parking Lot Opposite Channel Inn

| | Unit | Estimate | Unit Price | Total |
|----------------------------|----------|----------|----------------|---------------|
| Handrail | LF | 1272 | \$ 5.00 | \$ 6,360.00 |
| Retaining Wall and Columns | | | | \$ - |
| Stem | SF | 8268 | \$ 8.00 | \$ 66,144.00 |
| Footing | SF | 3816 | \$ 8.00 | \$ 30,528.00 |
| Asphalt | SF | 1970 | \$ 30.00 | \$ 59,100.00 |
| Borrow Backfill | CYD | 5423 | \$ 25.00 | \$ 135,575.00 |
| Sod and Seed | SYD | 4068 | \$ 10.00 | \$ 40,680.00 |
| Light Poles | Lump Sum | 1 | \$ 5,000.00 | \$ 5,000.00 |
| | | | | \$ 343,387.00 |
| | | | 15 Contingency | \$ 51,508.05 |
| | | | Total | \$ 394,895.05 |

Parking Lot Opposite Gangplank

| | Unit | Estimate | Unit Price | Total |
|-----------------|----------|----------|----------------|---------------|
| Asphalt | SF | 4775 | \$ 30.00 | \$ 143,250.00 |
| Borrow Backfill | CYD | 5412 | \$ 25.00 | \$ 135,300.00 |
| Sod and Seed | SYD | 9551 | \$ 10.00 | \$ 95,510.00 |
| Light Poles | Lump Sum | 1 | \$ 7,000.00 | \$ 7,000.00 |
| | | | | \$ 381,060.00 |
| | | | 15 Contingency | \$ 57,159.00 |
| | | | Total | \$ 438,219.00 |

Total for all Parking \$ 2,311,888.70

Improve/Upgrade Maine Ave (Urban Boulevard)

Improvements include:

Resurface WBL
Widen median by 6' and landscape
Widen EBL by 6' and provide asphalt overlay
Demolish EBL sidewalk and sod with 4" top soil
Electrical Work
Build 12' bike trail
Provide drainage improvements (excluding complex utility work)
Tree Planting

Cost:

The Scope of work above is equivalent to rebuilding half of the entire pavement
Length = 3060 feet
Width = 36 feet
SQYD = 12240

| | Unit | Estimate | Unit Price | Total |
|--|------|----------|-------------------|-----------------|
| | SQYD | 12,240 | \$ 135.00 | \$ 1,652,400.00 |
| | | | | \$ 1,652,400.00 |
| | | | 15% Contingencies | \$ 247,860.00 |
| | | | Total | \$ 1,900,260.00 |

Demolition and Upgrade Costs



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Natural Gas

| Item | Unit | Estimate | Unit Price | Total |
|-----------------------|------|----------|-------------------------------|-------------------|
| 8-inch HDPE | LF | 3,600 | \$ 35.00 | \$ 126,000 |
| Smaller Service Lines | LF | 500 | \$ 25.00 | \$ 12,500 |
| 8-inch Valves | each | 3 | \$ 3,000 | \$ 9,000 |
| Water Traps | each | 3 | \$ 200 | \$ 600 |
| Contingency (15%) | | | | 37,025 |
| | | | Subtotal | \$ 185,125 |
| | | | Design (10%) | \$ 18,513 |
| | | | Construction Management (10%) | \$ 18,513 |
| | | | Total | \$ 222,150 |

Potable Water

| Item | Unit | Estimate | Unit Price | Total |
|---------------------|------|----------|-------------------------------|-------------------|
| 12-inch Main | LF | 3,600 | \$ 75.00 | \$ 270,000 |
| 8-inch Main | LF | 1,000 | \$ 55.00 | \$ 55,000 |
| 4-inch Main | LF | 500 | \$ 45.00 | \$ 22,500 |
| Gate Valves | each | 50 | \$ 750.00 | \$ 37,500 |
| Fire Hydrant | each | 12 | \$ 5,000 | \$ 60,000 |
| Bituminous pavement | LF | 4,600 | \$ 20 | \$ 92,000 |
| Contingency (25%) | | | | 134,250 |
| | | | Subtotal | \$ 671,250 |
| | | | Design (10%) | \$ 67,125 |
| | | | Construction Management (10%) | \$ 67,125 |
| | | | Total | \$ 805,500 |

Sanitary Sewer

| Item | Unit | Estimate | Unit Price | Total |
|-------------------|------|----------|-------------------------------|-------------------|
| 12-inch Gravity | LF | 2,000 | \$ 100.00 | \$ 200,000 |
| 8-Inch Gravity | LF | 1,300 | \$ 85.00 | \$ 110,500 |
| 4-inch Gravity | LF | 1,000 | \$ 75.00 | \$ 75,000 |
| Manholes | each | 12 | \$ 2,500.00 | \$ 30,000 |
| Deep Excavations | LF | 1,500 | \$ 20 | \$ 30,000 |
| Contingency (25%) | | | | 111,375 |
| | | | Subtotal | \$ 556,875 |
| | | | Design (10%) | \$ 55,688 |
| | | | Construction Management (10%) | \$ 55,688 |
| | | | Total | \$ 668,250 |

Parks

| Civic Park at Site 6 | SF/Stalls | |
|--|-----------|--------------------|
| DESCRIPTION | | |
| Development of 2.5 acre park (\$50/SF) | 109,000 | \$5,500,000 |
| 240 Stall Below-grade Parking Garage ((\$9,000) residual land value/space) | 240 | \$2,160,000 |
| TOTAL | | \$7,660,000 |
| Market Square Park | | |
| Development of 75,000 sf park (\$40 additional/SF) | 75,000 | \$3,000,000 |
| TOTAL | | \$3,000,000 |
| Street-End Parks | | |
| 7th Street (\$25 additional/SF)* | 24,000 | \$600,000 |
| 9th Street (\$25 additional/SF)* | 22,000 | \$550,000 |
| 6th Street (\$25 additional/SF)* | 13,000 | \$325,000 |
| TOTAL | | \$1,475,000 |

* Some costs associated with Street-End Parks accounted for in transportation costs

**DRAFT****Build New Cul-De-Sac Access Roads at 9th, 7th, and 6th with connectors**

| | AREAS | | |
|-------------------------|---------------|---------------|----------------------|
| | 9th Street | 7th Street | 6th Street/Connector |
| Up to Maine Ave | 14,500 | 12,600 | 5,200 |
| Maine Ave to Cul-De-Sac | 8,880 | 9,000 | 7,500 |
| Cul-De-Sac | 10,760 | 10,400 | 8,640 |
| Total (SQFT) | 34,140 | 32,000 | 21,340 |

Unit Cost = \$14.50 for Mainline

Unit Cost = \$15.00 for Cul-De-Sac

Add access road between 7th and 9th street = 9,600 SQFT

| Cost | Area (FTSQ) | | Cost | |
|---------------------------|-------------|-------------------|------------------|--------------------|
| | Mainline | Cul-De-Sac | Mainline | Cul-De-Sac |
| 9th Street | 23,380 | 10,760 | \$339,010 | \$161,400 |
| 7th Street | 21,600 | 10,400 | \$313,200 | \$156,000 |
| 6th Street | 12,700 | 8,640 | \$184,150 | \$129,600 |
| Access Rd b/w 7th and 9th | 9,600 N/A | | \$139,200 N/A | |
| Sub-Total | | | \$975,560 | \$447,000 |
| | | | | \$1,422,560 |
| | | 15% Contingencies | | \$213,384 |
| | | Total | | \$1,635,944 |

New Access Road and Plaza South of Fish MarketLength = 600 ft
Width = 24 ft

| | Unit | Estimate | Unit Price | Total |
|-------------------------|------|------------------|------------|----------------------|
| Access Road | SQYD | 1,600 | \$ 130.00 | \$ 208,000.00 |
| Landscaping at the Loop | SQYD | 3,046 | \$ 80.00 | \$ 243,680.00 |
| | | | | \$ 451,680.00 |
| | | 15% Contingency | | \$ 67,752.00 |
| | | Sub Total | | \$ 519,432.00 |

Paving for Emergency Vehicles

| | Unit | Estimate | Unit Price | Total |
|--|------|-----------------|------------|----------------------|
| | SQYD | 4,267 | \$ 170.00 | \$ 725,390.00 |
| | | | | \$ 725,390.00 |
| | | 15% Contingency | | \$ 108,808.50 |
| | | Total | | \$ 834,198.50 |

Access between Sites 5 and 6 up to PromenadeLength = 340 ft
Width = 130 ft

| Unit | Estimate | Unit Price | Total |
|------|----------|------------------|------------------------|
| SQYD | 4,911 | \$ 100.00 | \$ 491,100.00 |
| | | | \$ 491,100.00 |
| | | 15% Contingency | \$ 73,665.00 |
| | | Sub Total | \$ 564,765.00 |
| | | Total | \$ 1,612,347.50 |

Maine Avenue Landscaping

| | |
|-----------------------------|----------------------|
| 10 Percent of A-2 (Alt-2) = | \$ 380,052.00 |
| 15 % Contingency | \$ 57,007.80 |
| | \$ 437,059.80 |

Park/Promenade Improvement (North of M) From 4th to 6th Street

| Unit | Estimate | Unit Price | Total |
|------|----------|-----------------|----------------------|
| SQYD | 2,133 | \$ 100.00 | \$ 213,300.00 |
| | | | \$ 213,300.00 |
| | | 15% Contingency | \$ 31,995.00 |
| | | Total | \$ 245,295.00 |

Landscape/Pedestrian Improvement (North of M) From 4th to 6th

| Unit | Estimate | Unit Price | Total |
|------|----------|-----------------|---------------------|
| SQYD | 800 | \$ 105.00 | \$ 84,000.00 |
| | | | \$ 84,000.00 |
| | | 15% Contingency | \$ 12,600.00 |
| | | Total | \$ 96,600.00 |

New Street and Sidewalk Costs